

MEETING SUMMARY

Community Environmental Working Group

“Striving for Continuous Environmental Improvements at Intel”

Date: August 15, 2012
Time: 5:00–7:00 p.m.
Location: Corrales Senior Center

Members Attending

John Bartlit, NM Citizens for Clean Air & Water
 Mike Williams, NM Citizens for Clean Air & Water
 Lane Kirkpatrick, Corrales resident

Hugh Church, American Lung Assc. in NM
 Thom Little, Intel
 Sarah Chavez, Intel
 Edward Pineda, Rio Rancho resident

Non-Members Attending

Brian Rashap, Intel
 Lynne Kinis, Corrales resident
 Roberta King, Corrales resident

Cabot Holmes, Rio Rancho resident
 Liz Shipley, Intel

Facilitator

Stephen Littlejohn, Facilitator

CJ Ondek, Recorder

HANDOUTS

- Draft Agenda
- Draft Meeting Summary July 18, 2012
- Action-Item Progress Report
- EHS Activity Reports
- Media reports and articles, as available
- Topics Discussion Grid
- Draft Short Report to the Community

PROPOSED AGENDA

- Welcome, Introductions, Announcements and Brief Items
- EHS Report and 114 Update
- Budget
- Annual Report
- Topics Priorities
- Dialogue with Brian Rashap, Intel Site Manager
- Additional Business
- Adjourn

Filename: CEWG Draft Meeting Summary 8-15-12, v. 3.

Approved: 9-19-12

Prepared or presented by: CJ Ondek & Stephen Littlejohn

Prepared for: CEWG

Date prepared or presented: September 11, 2012

WELCOME, INTRODUCTIONS, ANNOUNCEMENTS, AND BRIEF ITEMS

John Bartlit opened the meeting by stating the CEWG mission, which was to work towards continuous environmental improvements at Intel and improved community dialogue. Introductions were made.

Agenda—Revisions and Approval

No comments.

July 18, 2012 Meeting Summary—Revisions and Approval

No comments.

Brief Report on Meeting with Michael Jacobson

John Bartlit said he met Michael Jacobson, Intel's Director of Corporate Responsibility, on July 25th at Intel. Carrie Freeman, who previously attended CEWG meetings, was also present. The topic of discussion was the CEWG. Mr. Bartlit mentioned that Mr. Jacobson said some of the improvements initiated by the CEWG have spread to other Intel sites, but did not go into detail. Mr. Bartlit said they discussed the idea of improving the efficiency of regulatory process, about which Mr. Bartlit wrote a column last year. He offered to email the column or bring it to the next meeting for interested meeting attendees. Mr. Bartlit stressed that he did not hold this meeting on behalf of the CEWG, rather on his own volition. He said he suggested the possibility of new improvements at Intel, including a new kind of monitoring in which the steadiness of the operations was monitored rather than emissions. If a plant ran consistently, that should say something about emissions. It might be worth looking into this option. He said he also emailed the suggestion to Brian Rashap, Intel Site Manager. Edward Pineda commented that another problem with the regulatory system was that the Environmental Protection Agency (EPA) was subject to politics. Lane Kirkpatrick said that a former client, Pavilion Technologies now part of Rockwell in Austin, Texas, looked for relationships between operations and emissions. John Bartlit said Intel spent \$600 thousand a year on monitoring, and the data always looked the same. He suggested taking another angle. Stephen Littlejohn said that this topic might be good idea to pursue at future meetings.

Other Announcements

Lane Kirkpatrick said he wanted to learn more about the complaints made to Intel on July 12. He drew a map of his neighborhood, and said he planned to informally interview people living there to learn if they had similar experiences. His goal was to talk to 20 homes to see if a pattern emerged that would give some insight into spikes. He said he planned to ask if people ever smelled anything, when, what the smell was like, and how long had they lived there. He wanted to get a sense of complaints downwind from Intel. He said his informal investigation might lead to other ideas. Edward Pineda suggested looking at neighbor history and people who had moved away. Roberta King suggested his asking how many neighbors were not at home during the day and how good their olfactory senses were. Mr. Kirkpatrick said he had a feeling that stagnant air

occurred more at night, and that the olfactory sense differences would not matter after talking with 20 neighbors. Lynne Kinis suggested that Mr. Kirkpatrick explain what the term “spikes” meant to neighbors. Mr. Pineda said neighbors may respond in accordance with fear around their property values decreasing. Mr. Kirkpatrick also said he would report his findings to the CEWG.

Public Comment

- Edward Pineda asked when the comment period for meeting summaries was closed. Stephen Littlejohn replied that anyone who found an error could always correct it at the meeting. But practically speaking, he would discourage making changes once the summary was posted on the Web site. Mr. Littlejohn reminded that meeting attendees had several opportunities to make changes. Mr. Pineda asked about the possibility of creating new discussion around what was already discussed. Mr. Littlejohn said anyone could bring a topic up again for discussion, and if someone disagreed with a comment in a meeting summary, they could announce their disagreement at the next meeting and it would be captured on the new meeting summary. Mr. Pineda confirmed that a meeting summary was a record of what was said at a meeting. Mr. Littlejohn added that the meeting summary should include what a person “meant” to say, so if a comment was incorrectly captured they had the opportunity to correct it for accuracy.
- Cabot Holmes said he received a letter from Intel and was confused by it. The letter mentioned “possible short term release of hydrogen fluoride (HF).” The media said that Intel had been releasing HF for the last 10 years. He asked for clarification. He also commented that he lived near the Rio Rancho country club, and the wind often blew in from the east. Whether or not the air contained an odor was unimportant, as dangerous emissions might be undetectable through smell.
- Thom Little replied that the content of Intel’s letter said that the CEWG, and Mike Williams specifically, were planning to conduct a study of spikes and changes in emissions. They would try to look at what would cause people downwind to smell something. He explained that since Mr. Williams’ specialty was air modeling, he had offered to conduct a scientific study on how this might occur and if there was concentration great enough to be a health concern. The letter tried to explain this study to recipients and asked for their participation or suggestion. The letter did not say that Intel was considering releasing any more HF. In fact, Mr. Little added that Intel emissions had been reduced and were monitored by the EPA through the NMED. Sarah Chavez said that Intel regularly did stack emissions testing that looked at chemicals used on site. HF was a regulated, standard computer chip manufacturing chemical.
- Edward Pineda asked how Intel’s NMED permit attempted to control the level of HF and did the community think that was enough protection? Mike Williams said NMED required the emissions to be below a certain level but did not specify what the

concentrations should be. NMED was concerned about a few pollutants, but HF was not one of them even though it was considered hazardous. HF was more important over the short term rather than long term.

- Roberta King said she had downloaded the short reports and asked why it was called an “addendum” rather than a “short report”. Mr. Littlejohn said that the first report in 2006 only said “addendum”, the others used the term “short report.” Also, she had read the CEWG’s editorial policy in the August 8 newsletter that listed the requirements for submitting to the Web site. She said it felt like she had reverted back to days of the Gestapo, when human beings had few rights and everything was controlled by something else. The submission policy was so rigid, that if any one person on the CEWG disagreed, it had to be redone. With two Intel employees having voting rights on CEWG, it was not fair, Ms. King said. Stephen Littlejohn said he would send the editorial policy to the group to review for change.

ACTION ITEM: Stephen Littlejohn will send the editorial policy to the group to review.

EHS REPORT and EPA 114 Update

Thom Little reported that there were no unabated emissions on this report. However, a 36-minute downtime occurred on 8/13, which would be listed in next month’s report. Lane Kirkpatrick asked if the complaint on July 12 asked for a grab sample. Mr. Little said no, and in this particular incidence, they did not even want Mr. Little to return the call. He did return the call to the complaint on 7/30.

- Lynne Kinis spoke on behalf of the 7/12 caller and said this person had been calling Intel for 20 years and did not ask for a response because of the pattern of not getting satisfactory answers. Thom Little said he had long conversations with caller, and they could only do what they were capable of doing. Roberta King said the wind and terrain created a lot of variability.
- Mr. Little noted a typo in the report. The section that read “Neighbors Calling In” should read “2” and not “1”. He said he would email Mr. Littlejohn with the correction.

ACTION ITEM: Thom Little will email Stephen Littlejohn with the EHS Report correction. The section that read “Neighbors Calling In” should read “2” and not “1”.

- Lane Kirkpatrick asked if Mr. Little had a spatial distribution of complaints to use in his quest to talk with his neighbors. Mr. Little also said there was some level of anonymity involved, which was why they used a “zone” map.

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ACTION ITEM: Thom Little will call Lane Kirkpatrick to discuss zones and maps.

BUDGET

The proposal was to allocate \$2,000 to install AV equipment (a screen and projector) at the Corrales Senior Center, and \$3,000 to meet staffing needs of the HF study. John Bartlit added that \$5,000 was available. Edward Pineda commented that he supported this proposal. All CEWG had consensus around the proposal.

DECISION: The CEW approved allocating \$2,000 to install AV equipment (a screen and projector) at the Corrales Senior Center, and \$3,000 to meet staffing needs of the HF study.

- Non-CEWG members had no comment. Edward Pineda asked if there was a way to protect the equipment from abuse. Mr. Littlejohn said the equipment would be permanently installed for use by all who frequented the Center, and the Community Center staff would administer and monitor the equipment. Stephen Littlejohn said the danger was that someone who didn't know how to use the equipment would use it incorrectly. Lane Kirkpatrick said there should be a sign telling people whom to call for IT issues. Thom Little said he would work with John Avila and the Sandoval County contact to make sure these concerns were noted.

ACTION ITEM: Thom Little will communicate with John Avila and the Sandoval County contact to make sure CEWG concerns were noted around equipment usage.

ANNUAL REPORT

Hugh Church said the report was called by two different names—the short report and the annual report—and recommended choosing one name and sticking with it. Stephen Littlejohn agreed.

- Roberta King said she objected to the report's footnote number one. She said that previous reports had a blanket statement that listed the different entities involved, and she did not object to this version. She objected to the editorial commentary in the current version, which she perceived as political in nature. It did not belong in a "factual" report, Ms. King said. Stephen Littlejohn said that the footnote came about because there were objections that the group was taking credit for things that others had a hand in. Therefore, John Bartlit said that they were most interested in continuous environmental improvement, and they did not want anyone to perceive that the CEWG was solely responsible for all the improvements. Mr. Bartlit said that the 2008 version was complained about at the time also. He believed strongly that some notion of credit be

included on the Annual Report, and moved to return to the 2008 short version. Lane Kirkpatrick said either version got the point across.

DECISION:

- The Short Report was approved. The shorter footnote from 2008 will be used instead of the footnote in the draft.

TOPICS PRIORITIES

Stephen Littlejohn asked the group to look at the topics list and decide how to proceed. This exercise would help the group to prioritize. Each topic would be categorized as a “mostly report item,” “mostly discussion item,” “mostly action item,” and “realistic action possible.”

- **ATSDR—Mostly Report Item; Mostly Action Item (Pending):** Once the ATSDR released their report, then this item would move to high priority. Edward Pineda asked what kind of response the CEWG would offer to the ATSDR report, for example, would the CEWG be allowed to comment. Lane Kirkpatrick expressed concern about the list being static. Thom Little said that the list was dynamic, and this exercise was a way to prioritize. New topics were always welcomed on the list. But the point was to examine the CEWG’s capacity to effect change. Mr. Kirkpatrick suggested they identify the topics with which they could make a real difference. He also asked to add John Bartlit’s new topic on monitoring operational consistency.
- **HF/Spikes—Mostly Action Item.**
- **Lung Disease Panel—Mostly Report Item:** Lane Kirkpatrick was concerned about prioritizing how important these topics were in terms of reducing emissions at Intel. John Bartlit said the answer was “who has an idea.” Without the idea they could not look into it. Mr. Kirkpatrick said he wanted to focus on which topics would have the most environmental improvement and where they could make the most difference.
- **Management Dialogue—Mostly Discussion Item.**
- **NMDH Health Survey Follow Up Study:** The group seemed confused as to which survey this item referred to: 1. A health survey conducted in the 90s or early 2000s or 2. A report conducted by toxicologists last year that looked at the pulmonary fibrosis cluster in Corrales. John Bartlit reminded the group that they sent this latter report for review to Jonathan Samet, who said it looked good, and to National Jewish Hospital, who did not have time to look at it. Stephen Littlejohn remembered that this item had to do with a health survey conducted many years ago, but suggested a new idea was to have a panel on pulmonary fibrosis. Lane Kirkpatrick asked for pulmonary fibrosis to be on the agenda soon as a discussion item. The group did not know what to do with this item yet.
- **Odor Contaminant Control—Mostly Action Item**

- **Status of Supercritical CO²:** Stephen Littlejohn reminded the group that Frank Gallegos reported on this item a few years ago and concluded it was not a serious idea in the industry.
- **Scrubber Emissions—Mostly Discussion, Action Item, Pending.**

Stephen Littlejohn said they could go down the action item list and choose to focus on which items were most realistic. Lane Kirkpatrick said he thought the purpose was to decide where to focus and take action. Edward Pineda suggested they designate the best items as gold, silver and bronze in terms of most promising to accomplish.

DIALOGUE WITH BRIAN RASHAP, INTEL PLANT MANAGER

Brian Rashap, Intel Corporate Services Site Manager, asked the CEWG questions to learn and understand more about what they were doing. Mr. Rashap said up until a year and a half ago, he spent 16 years working in the day-to-day operations on the factory floor. Today, his scope was outside the physical factory floor itself, and included cafeterias, janitorial services, parking lots, and operational utilities (water, waste, natural gas, emissions, electrical and keeping the factory floor clean). The only thing that was not in his direct control that the CEWG would be concerned about was the manufacturing chemistry, which was established at the Oregon site. He said his NM team was responsible for getting those chemicals safely into the factory and then getting the waste solids safely out.

- Mr. Rashap said he was aware of the CEWG's work as summarized in the Annual Report and appreciated the CEWG's diligence. He was also aware of the upcoming HF study and thought reports were good, but he wanted to know what the CEWG saw as concrete actionable steps to work on over the next two-to-three years.
- Stephen Littlejohn asked group members what would have happened as a result of CEWG's work if they were highly successful over the next two years. John Bartlit responded that emissions and their detrimental effects would be reduced, which depended strongly on good ideas to accomplish this result. He said he emailed Mr. Rashap an idea regarding monitoring operational stability. Mr. Littlejohn summarized as follows: In two years, a successful CEWG would have had several good ideas to act on to achieve environmental improvements. Lane Kirkpatrick said he would like to see more public involvement. The degree to which the public and CEWG believed that the welfare of the people was protected would build up confidence, and if that was accomplished, a lot of people would feel good.
- Edward Pineda said that reducing emissions was a theoretical statement because they needed to distinguish emissions from pollutions and look at health effects on workers and the community. They needed to look at chemicals that were known detriments to health and get rid of contamination and pollution.

- Thom Little said he would like the CEWG to take a broader scope and expand to other elements of interest to a broader community in the Middle Rio Grande region, including water. Sarah Chavez said she wanted to look at getting a broader range of environmental improvement beyond air emissions and more community participation.
- Mike Williams said to identify the most significant environmental exposures and begin planning how to mitigate them. Hugh Church mentioned the extreme variability of wind direction and speed. Intel had one weather tower near the end of the campus that needed a better location. He suggested getting a better measurement system of what the winds were doing down the slope and thought it could be done at a reasonable cost. Mr. Rashap said he agreed. Intel worked diligently and would continue to work to keep emissions levels as low as possible below the hazard zone to make it safe for workers and everyone in the community.
- Brian Rashap asked if the concerns addressed by the CEWG were representative of the broader community, and if not, did the CEWG care, and what would they do to better understand these concerns. Edward Pineda said he would like to evaluate the potential three “medal winners” by using the crystalline silicon study as an example. Although the process was long with rough edges, the crystalline silica study was a successful undertaking, even if others didn’t agree with the results. That example showed that any significant improvement needed two years to unfold. Mr. Pineda also suggested adding a couple more community members to join the CEWG.
- Lane Kirkpatrick asked what it meant to look at things from an integrative visionary point of view in two years. Brian Rashap said site visits made by CEWG members to view Intel’s holistic processes might spark some insight into this question. John Bartlit said an integrated approach was if someone brought a proposal for discussion on pros and cons of possible execution and resources involved.
- Lane Kirkpatrick said Intel was complex. They were modernizing and looking into possible plant expansion, and yet some emissions were being reduced. All of that affected environmental health and safety. If they took a holistic view, the CEWG would have to set priorities on where they could realistically help. Brian Rashap said that as Intel developed new processes in Oregon, a huge environmental health and safety team vetted through the new technologies and their effects. Also the New Mexico site had a local environmental team, and they spent a lot of time working with NMED and EPA and equipment suppliers to look at sources of potential hazards. The data suggested that Intel was effective at doing this, and he appreciated the concerns raised by the CEWG.

- Brian Rashap said he had the following conversation with a Corrales resident: Intel being Intel, this resident would not believe anything Intel ever said. However, “I would like you to be transparent.” He said Intel’s goal was to be transparent and provide the CEWG with as much raw information as possible. So the dilemma was that people in the community would not believe anything he said, which made it hard for him to be transparent. He asked the CEWG for advice on how to deal with this dilemma. John Bartlit said the CEWG had a similar dilemma, and it was always a problem. The same problem existed in American politics, but he believed they made more progress in Corrales and Rio Rancho than Democrats or Republicans in Washington D. C. He said it was long, hard and slow, and the CEWG intended to go as long as they could.
- Edward Pineda said that last year Intel began a meeting about a new permit with taking questions from the community, and the community responded with an “uproar” of questions. Later on, the community was accused of taking over and disrupting the meeting. Mr. Pineda said if Mr. Rashap wanted to hear from the community, Intel should hold an open meeting between Intel management and the community. If they allowed the community to express their concerns they would get a lot of input. Mr. Rashap said that the conversation he had with the community member was very valuable to him to learn about people’s concerns and passions. He promised that Intel would continue to be open and transparent and share with the community.
- Mike Williams asked how the CEWG could help Intel avoid future surprises, in reference to Intel’s changing to 1-heptane thiol, which created a skunk-like odor in the community. Brian Rashap said Intel was surprised by that experience as well, and the lesson for Intel was two-fold. 1. They changed their internal procedures to be more sensitive to scaling effects, and 2. The challenge for Intel was that in buttoning up the factory to keep odors from escaping, it went into the plant instead through backwash in p-traps. Thus, making the factory tight created an indoor air pollution issue. He said he appreciated the community’s concern, and the questions the CEWG asked Intel made them better community members.
- John Bartlit asked if there were a chance or benefit for the Oregon research group to attend a CEWG meeting while they were in town. Brian Rashap responded that because of corporate intellectual property rights, some questions could not be addressed. Intel worked on a “need to know basis.” For example, the New Mexico site would not know what was going on with chemical usage at the Arizona plant unless they used the exact same processes and chemicals and a risk was involved. However, Intel did fully disclosed chemical usage in the New Mexico plant to the local and state environmental authorities.

- Hugh Church asked if scrubber stack heights should be increased, and mentioned that this might be an issue in modeling. Brian Rashap responded that they should let the data drive this need.
- Lynne Kinis asked about monitoring weather. She said that the proposed HF study would model weather from '93-'94, which was completely different from the weather now. She could not understand how using a model based on this old information would be accurate for the study. Mike Williams responded that he would use statistical techniques to see how representative those years were. A second question he would look at was how representative the weather data needed to be.
- Ms. Kinis affirmed Mr. Church's suggestion to move the weather recording station to a more relevant location. She also mentioned community members were interested and passionate about attending the meeting referenced by Mr. Pineda, and some of them even attended a second meeting in which Intel brought their employee-Corrales residents, who put down everything the residents said. She said that Corrales people were not stupid, they got the message and would not waste their time attending any more meetings. "Look at how many residents were present now?" Ms. Kinis asked.
- Lane Kirkpatrick thought it was a good idea to add the weather station to CEWG priorities since a lot was dependent on meteorological data. Brian Rashap said this was a good actionable task area for the CEWG to work on. He asked for the CEWG to help Intel be transparent with "given the data we have, this is what we expect to see." For example, if the wind were blowing in one direction, this is what we would expect to see. In other words, help with identifying correlations. He said he appreciated Thom Little's efforts with following up on complaints, and this would help his work in the community. But as CEWG gathered more sophisticated data, he would appreciate the CEWG's help with correlating events to help focus on the real issues.
- Edward Pineda said he supported an additional weather station. He asked why the CEWG and Mr. Williams must be restricted to old data and monitoring data. He suggested conducting a phase two HF study, which would entail repeating the study with current data.

ADDITIONAL BUSINESS

None.

MEETING ADJOURNED

NEXT MEETING

September 19, 2012, 5 to 7 p.m.

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Corrales Senior Center in Corrales.

DECISION SUMMARY

1. The CEW approved allocating \$2,000 to install AV equipment (a screen and projector) at the Corrales Senior Center, and \$3,000 to meet staffing needs of the HF study.
2. The Short Report was approved. The shorter footnote from 2008 will be used instead of the footnote in the draft.